

Amendments to the Claims:

Please add new claims 33-71 as follows.

33 (NEW CLAIM): A germicidal system resistant to environmental exposure comprising:

a germicidal tube comprising an envelope, a stem, and a gas enclosed by the envelope and the stem

a power supply adapted to receive power from an external source and provide power to the germicidal tube

an electrical interface electrically connecting an electrode of the stem and the power supply via plural wires

a fixture supporting the power supply and the germicidal tube

a cover adapted to ruggedize the electrical interface comprising

an exterior surface resistant to at least one of falling dirt, rain, sleet, snow, windblown dust, formation of ice, splashing water, hose directed water, and environmental corrosion

a material resistant to at least one of external impacts, UV exposure, environmental exposure, heat, and moisture.

34 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 33, wherein the cover is further adapted to couple to the fixture and at least partially enclose the electrical interface.

35 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 34, wherein the cover is further adapted to seal to the fixture.

36 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 35, wherein the cover is completely enclosing the electrical interface.

37 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 36, wherein the material is thick and rigid.

38 (NEW CLAIM): A germicidal system for harsh environments, the germicidal system comprising:
a germicidal tube comprising an envelope, a stem, and a gas enclosed by the envelope and the stem

a power supply adapted to receive power from an external source and provide power to the germicidal tube

a fixture comprising

a base adapted for mounting on an external surface of a wall, including an opening through which the envelope of the tube is passed for installation of the tube in the fixture and removal of the tube from the fixture, whereby the installation of the tube in the fixture couples the tube to the fixture

one or more fixture walls coupled to the base wherein the stem, the base and the fixture walls define an interior space of the fixture

a tube holder, attached to one of the fixture walls, for holding the germicidal tube, at least partially support the germicidal tube

wherein the fixture is resistant to environmental conditions including at least one of falling dirt, rain, sleet, snow, windblown dust, formation of ice, splashing water, hose directed water, environmental corrosion to protect the interior space of the fixture from the environmental conditions.

39 (NEW CLAIM): The germicidal system for harsh environments of claim 38, wherein at least one of the fixture walls and the base of the fixture are separable.

40 (NEW CLAIM): The germicidal system for harsh environments of claim 38, wherein at least one of the fixture walls and the base of the fixture have a clamshell design.

41 (NEW CLAIM): The germicidal system for harsh environments adapted of claim 38, wherein the base of the fixture includes the tube-holder.

42 (NEW CLAIM): The germicidal system for harsh environments of claim 38, wherein the tube holder includes an electrical connector which engages at least one electrode in the stem of the tube when the tube holder engages the stem.

43 (NEW CLAIM): The germicidal system for harsh environments of claim 38, wherein the germicidal tube when energized emits UVC without substantial ozone and can withstand skin-effect cooling in an air flow of between 200 cfm and 600 cfm at between 30 degrees Fahrenheit and 65 degrees Fahrenheit.

44 (NEW CLAIM): The germicidal system for harsh environments of claim 38 wherein the tube emits UVC.

45 (NEW CLAIM): The germicidal system for harsh environments of claim 38 wherein at least one of the fixture walls and the base of the fixture have a clamshell design the tube holder includes an electrical connector which engages at least one electrode in the stem of the tube when the tube-holder engages the stem the germicidal tube which, when energized, emits UVC without substantial ozone and can withstand skin effect cooling in an air flow of between 200 cfm and 600 cfm at between 30 degrees Fahrenheit and 65 degrees Fahrenheit.

46 (NEW CLAIM): A germicidal system resistant to environmental exposure comprising: a germicidal tube comprising an envelope, a stem, and a gas enclosed by the envelope and the stem means for receiving power from an external source and providing power to the germicidal tube means for electrically connecting an electrode of the stem and the power receiving and providing means means for supporting the power receiving and providing means and the germicidal tube means for ruggedizing the electrically connecting means comprising an exterior surface resistant to at least one of falling dirt, rain, sleet, snow, windblown dust, formation of ice, splashing water, hose directed water, and environmental corrosion a material resistant to at least one of external impacts, UV exposure, environmental exposure, heat, and moisture.

47 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 46, wherein the ruggedizing means includes means for coupling to the supporting means and means for at least partially enclosing the electrically connecting means.

48 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 47, wherein the ruggedizing means includes means for sealing to the supporting means.

49 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 48, wherein the ruggedizing means is completely enclosing the electrically connecting means.

50 (NEW CLAIM): The germicidal system resistant to environmental exposure of claim 49, wherein the material is thick and rigid.

51 (NEW CLAIM): A germicidal system for harsh environments, the germicidal system comprising:

a germicidal tube comprising an envelope, a stem, and a gas enclosed by the envelope and the stem

means for receiving power from an external source and providing power to the germicidal tube

a fixture comprising

means for mounting on an external surface of a wall, including an opening through which the envelope of the tube is passed for installation of the tube in the fixture and removal of the tube from the fixture, whereby the installation of the tube in the fixture couples the tube to the fixture

means for coupling to the mounting means wherein the stem, the mounting means and the coupling means define an interior space of the fixture
means for at least partially supporting the germicidal tube wherein the supporting means is attached to the coupling means
wherein the fixture is resistant to environmental conditions including at least one of falling dirt, rain, sleet, snow, windblown dust, formation of ice, splashing water, hose directed water, environmental corrosion to protect the interior space of the fixture from the environmental conditions.

52 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the coupling means and the mounting means of the fixture are separable.

53 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the coupling means and the mounting means of the fixture have a clamshell design.

54 (NEW CLAIM): The germicidal system for harsh environments adapted of claim 51, wherein the mounting means of the fixture includes the supporting means.

55 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the supporting means includes means for electrically engaging at least one electrode in the stem of the tube when the supporting means engages the stem.

56 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the germicidal tube when energized emits UVC without substantial ozone and can withstand skin-effect

cooling in an air flow of between 200 cfm and 600 cfm at between 30 degrees Fahrenheit and 65 degrees Fahrenheit.

57 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the tube emits UVC.

58 (NEW CLAIM): The germicidal system for harsh environments of claim 51, wherein the coupling means and the mounting means of the fixture have a clamshell design the supporting means includes an electrically engaging means which engages at least one electrode in the stem of the tube when the supporting means engages the stem the germicidal tube which, when energized, emits UVC without substantial ozone and can withstand skin effect cooling in an air flow of between 200 cfm and 600 cfm at between 30 degrees Fahrenheit and 65 degrees Fahrenheit.

59 (NEW CLAIM): A germicidal lamp for harsh environments comprising:
means for emitting UVC without substantial ozone and for withstanding skin-effect cooling,
the emitting means including an envelope and a stem
a fixture comprising
means for sealing against a wall to thereby prevent splashing water, hose-directed
water, ice formations, wind, dirt, rain and environmental corrosion to pass there through
means for opening the fixture

means for sealing the fixture tightly to thereby prevent splashing water, hose-directed water, ice formations, wind, rain and environmental corrosion from entering the interior space of the fixture

means for allowing the emitting means to be passed through the fixture for installation and removal

means for sealing the fixture from air flowing into the fixture

means for engaging and securing the emitting means.

60 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the emitting means comprises an elongate hollow cylinder.

61 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the emitting means includes means for causing UVC output to peak when an air flow of between 200 cfm and 600 cfm at between 30 °F and 65 °F is passed across the emitting means.

62 (NEW CLAIM): The germicidal lamp for harsh environments of claim 61, wherein the emitting means includes means for causing UVC output to peak when an air flow of 400 cfm at 55 F is passed across the emitting means.

63 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the emitting means includes means for emitting UVC of at least 10 $\mu\text{W}/\text{cm}^2$ per inch arc length at one meter when an airflow of between 100 and 800 cfm is passed across the emitting means.

64 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the emitting means includes means for emitting UVC of at least 10 µW/cm² per inch arc length at one meter when an air flow of between 0 °F and 70 °F is passed across the tube.

65 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, having a weight of less than two lbs.

66 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the fixture includes means for separating.

67 (NEW CLAIM): The germicidal lamp for harsh environments of claim 59, wherein the fixture has a clamshell design.

68 (NEW CLAIM): The germicidal lamp for harsh environments adapted to be mounted to a wall of claim 59, including means for sealing the fixture against the wall, creating a seal between the fixture and the wall that can withstand air pressure of at least 15 inches of water gage.

69 (NEW CLAIM): The germicidal lamp for harsh environments adapted to be mounted to a wall of claim 59, including means for sealing the fixture to withstand air pressure of at least 30 inches of water gage.

70 (NEW CLAIM): An air handling system comprising the germicidal lamp of claim 59.

71 (NEW CLAIM): An HVAC system comprising the germicidal lamp of claim 59.